

## CLAIM AMENDMENTS

1. (Currently Amended) A method comprising:  
receiving a signal indicating a modulated symbol during a given time slice of the signal;  
performing sliding window frequency transformations of the signal, each sliding window transformation being associated with a different time interval of the signal;  
based on the window frequency transformations, selecting one of the time intervals to correspond to said time slice; and  
using the result of the frequency transformation associated with the selected time interval to obtain an indication of the demodulated symbol.
2. (Original) The method of claim 1, wherein the selecting comprises:  
correlating the sliding window transformations with a first pilot code;  
correlating the sliding window transformations with a second pilot code; and  
comparing the results of the correlations with the first and second pilot codes to select said one of the time intervals.
3. (Original) The method of claim 2, wherein  
the first pilot code is associated with the symbol, and  
the second pilot code is associated with another symbol adjacent to the first symbol in time.
4. (Original) The method of claim 2, wherein the comparing the results of the correlations comprises:  
finding a time interval between where the correlations peak.
5. (Original) The method of claim 1, wherein the performing the sliding window transformations comprises:  
for each transformation, adding at least one additional sample of the signal to the transformation as compared to a previous transformation and removing at least one sample used in the previous transformation.

6. (Original) The method of claim 1, wherein performing the sliding window frequency transformations comprises:

sampling the signal to produce samples at different points in time;

creating a window to select a predetermined number of the samples within the time interval associated with the sliding window transformation; and

performing one of the sliding window transformations for each window.

7. (Original) The method of claim 6, wherein performing each sliding window transformation comprises:

advancing the window in time before performing the next sliding window transformation.

8. (Original) The method of claim 7, wherein the advancing comprises:

advancing the window in time by a predetermined number of sampling periods.

9. (Original) The method of claim 1, wherein the signal comprises an Orthogonal Frequency Division Multiplexing signal.

10. (Currently Amended) A method comprising:

generating a modulated signal, the signal comprising a first modulated symbol and a second modulated symbol adjacent to the first modulated symbol in time;

scrambling first pilot tones associated with the first modulated symbol with a first pilot tone code; and

scrambling second pilot tones associated with the second modulated symbol with a second pilot tone code to indicate a time interval in which to demodulate the first modulated symbol from the signal.

11. (Original) The method of claim 10, wherein the modulated signal comprises an Orthogonal Frequency Division Multiplexing signal.

12. (Original) The method of claim 10, further comprising:  
transmitting the modulated signal.

13. (Original) A method comprising:  
receiving a signal containing a modulated symbol;  
performing frequency transformations of the signal;  
correlating the frequency transformations with a first pilot code;  
correlating the frequency transformations with a second pilot code; and  
comparing the results of the correlations with the first and second pilot codes to select  
one of the frequency transformations to obtain an indication of the demodulated symbol.

14. (Original) The method of claim 13, wherein  
the first pilot code is associated with the symbol, and  
the second pilot code is associated with another symbol adjacent to the first symbol in  
time.

15. (Original) The method of claim 13, wherein the comparing of the results of the correlations comprises:

finding a time interval between where the correlations peak.

16. (Original) The method of claim 13, wherein the signal comprises an Orthogonal Frequency Division Multiplexing signal.

17. (Currently Amended) A receiver comprising:  
circuitry to receive a signal indicating a modulated signal symbol associated with a given  
time slice of the signal symbol; and  
an engine to:  
    perform sliding window frequency transformations of the signal, each sliding  
    window transformation being associated with a different time interval of the signal;  
    based on the window frequency transformations, select one of the time intervals to  
    correspond to said given period-of time slice; and  
    use the result of the frequency transformation associated with the selected time  
interval to obtain an indication of the demodulated symbol.

18. (Original) The system of claim 17, wherein  
the engine correlates the sliding window transformations with a first pilot code,  
correlates the sliding window transformations with a second pilot code, and  
compares the results of the correlations with the first and second pilot codes to select said  
one of the time intervals.

19. (Original) The system of claim 18, wherein  
the first pilot code is associated with the symbol, and  
the second pilot code is associated with another symbol adjacent to the first symbol in  
time.

20. (Original) The system of claim 18, wherein the engine compares the results of the  
correlations by finding a time interval between where the correlations peak.

21. (Original) The system of claim 17 wherein the engine performs the sliding  
window transformations by for each transformation, adding at least one additional sample of the  
signal to the transformation as compared to a previous transformation and removing at least one  
sample used in the previous transformation.

22. (Original) The system of claim 17, wherein the engine samples the signal to produce samples at different points in time and creates a window to select a predetermined number of the samples within the time interval associated with the sliding window transformation.
23. (Original) The system of claim 22, wherein the engine advances the window in time before performing the next sliding window transformation.
24. (Original) The system of claim 23, wherein the engine advances the window in time by one sampling period.
25. (Original) The system of claim 17, wherein the signal comprises an Orthogonal Frequency Division Multiplexing signal.
26. (Original) A apparatus comprising:  
circuitry to receive a signal containing a modulated symbol; and  
an engine to:  
perform frequency transformations of the signal,  
correlate the frequency transformations with a first pilot code,  
correlate the frequency transformations with a second pilot code, and  
compare the results of the correlations with the first and second pilot codes to select one of the frequency transformations to obtain an indication of the demodulated symbol.
27. (Original) The apparatus of claim 26, wherein  
the first pilot code is associated with the symbol, and  
the second pilot code is associated with another symbol adjacent to the first symbol in time.
28. (Original) The apparatus of claim 26, wherein the engine finds a time interval between where the correlations peak to select one of the frequency transformations.

29. (Original) The apparatus of claim 26, wherein the signal comprises an Orthogonal Frequency Division Multiplexing signal.